UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,862	08/20/2001	Baoxin Li	KLR 7146.124	7425

55648 7590 11/30/2006

KEVIN L. RUSSELL
CHERNOFF, VILHAUER, MCCLUNG & STENZEL LLP
1600 ODSTOWER
601 SW SECOND AVENUE
PORTLAND, OR 97204

EXAMINER	
DIEP, NHON THANH	
ART UNIT	**PAPER NUMBER**
2621	

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/933,862	LI ET AL.	
	Examiner	Art Unit	
	Nhon T. Diep	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 September 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-16,18-22 and 24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-16,18-22 and 24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *8/20/2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/2006; 11/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-7, 9-16 and 18-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

With regard to the applicants newly amended limitation of "the identifying is not based upon continuous dynamic programming" as specified in claims 1, 5, 9, 15 and 21; the specification discloses the identifying of the start of a play may be "a field has a general green color and the sufficient general green region may be further defined having shape characteristics, such as substantial straight edges, a set of substantially parallel edges, a four-sided polygon, etc...and further more, the spatial region of the general green color is preferably centrally located within a frame; however, the specification concludes that in some implementations, a dominant generally green color may be a necessary condition but not a sufficient condition for determining the start frame of play." And particularly, claim 5 claims, in addition to "the identifying is not based upon continuous dynamic programming", the identifying also based upon a series of activities defined by the rules of football that could result in at lease ... Since, in

order to find frames that are proving a sufficient condition for determining the start frame of play, the search involves the reviewing of many frames (or as claimed in claim 5, based upon a series of activities) and as a result, the search involves a continuous dynamic programming, which is contradict with newly amended limitation. Therefore, claims 1-7, 9-16 and 18-24 as recently amended are rejected as failing to comply with the enablement requirement since without relying upon continuous dynamic programming; it is not sufficient to determine the start frame of play.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-7, 9-16 and 18-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "continuous dynamic programming" in claims 1, 5, 9, 15 and 21 is a relative term, which renders the claim indefinite. The term "continuous dynamic programming" is not defined by the claim, the specification does not provide a standard for ascertaining the "continuous dynamic programming", and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention. It is requested that the applicants shall further clarify the term as to be consistent with the specification. The examiner will interprets the above term as broadly as reasonable in light of the specification for the purpose of prior art consideration.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-7, 9-16, 18-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over by the article "Indexing of Baseball Telecast for Content-based Video Retrieval" authored by Kawashima et al (hereinafter Kawashima et al) as et forth in the previous office action.

It is noted that the examiner maintains all of his rejection as set forth in the previous Office Action based on the interpretation that in order to determine a start frame of play, the search process involves reviewing of many consecutive frames and therefore, involves a continuous dynamic programming.

7. Claims 1, 5, 9, 15 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamir et al (US 5,923,365).

Tamir et al discloses sports event video manipulating system for highlighting movement comprising the same method of processing a video including baseball comprising:

(a) identifying a plurality of segments of said video based upon an event, wherein said identifying is not based upon continuous dynamic programming, said event is characterized by a start time based upon when the ball is put into play and an end time based upon when the ball is considered out of play, where each of said segments includes a plurality of frames of said video (fig. 1, col. 7, ln. 28-col. 8, ln. 16); and

(b) creating a summarization of said video by including said plurality of segments, where said summarization includes fewer frames than said video page (highlighting, col. 11, ln. 16-29 and col. 12, ln. 3-8) as specified in claims 1, 2, 9 and 21. It is noted that Kawashima et al does not particularly disclose that the identification of the plurality of segments of said video based upon an event of a football game. However, Tamir et al further teaches that the disclosed system is used for manipulation of a sport event and it is the examiner's opinion that football is essentially a cyclic sport game wherein the actions, by the rules of football, starts, in most cases, at the time the ball is snapped by the Center and stops, when the player who possesses the ball, is tackled by the opposing player(s). And therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to further apply the concept of Kawashima et al in indexing the games of football just as Kawashima et al did for the game of baseball. Doing so would help to retrieve a target scene from a summarized version of video using indexes marked to each play.

Re claims 15 and 21: Tamir et al further teaches that the system will automatically classify objects according to their colors (col. 12. ln. 5-8) and since any football field has either natural grass or artificial grass and in both cases, the color of grass is green and therefore, before the snap, when cameras record the start of a play, the video frame at that time would have classified colors as green color.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Ochiai et al (US 6,757,482) discloses a method and device for dynamically editing received broadcast data.

b. Jain et al (US 6,144,375) discloses a multi-perspective viewer for content-based interactivity.

c. Ishii et al (US 6,546,188 B1) discloses a editing system and editing method

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T. Diep whose telephone number is 571-272-7328. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ND
11/25/2006

NHON DIEP
PRIMARY EXAMINER